

IN THE CLAIMS:

Please amend the claims as follows:

1 1. (Currently amended) A transceiving unit for wireless communications over the
2 industrial-scientific-medical (ISM) spectrum comprising:

3 (a) an RF sub-module for transceiving information in a 2.4 to 2.5 GHz band; and,

4 (b) a DECT baseband processor coupled and adapted to provide time slot and frame timing
5 to the RF sub-module such that at least seventy-five hopping carrier frequencies between 2.4 GHz
6 and 2.4835 GHz and a minimum hop rate of 2.5 hops per second are maintained.

1 2. (Original) The transceiving unit as recited in claim 1 wherein the baseband
2 processor comprises first and second means for supporting concurrent voice and data
3 communications.

1 3. (Original) The transceiving unit as recited in claim 1 wherein each time slot
2 comprises a 32-bit preamble for synchronization, a 64 bit A-field for signaling and a B-field
3 comprising 320 bits and 4 bit for CRC.

1 4. (Original) The transceiving unit as recited in claim 1 wherein the baseband
2 processor provides time slot and frame timing such that the at least seventy-five carrier frequencies
3 are programmed ranging between 2401.122 MHz to 2479.813 MHz and spaced 1.063 MHz apart.

1 5. (Currently amended) The transceiving unit as recited in claim 4 wherein the
2 baseband processor provides time slot and frame timing such that each of the at least seventy-five
3 ~~channels~~ carrier frequencies supports a ten-millisecond frame.

1 6. (Original) The transceiving unit as recited in claim 5 wherein the baseband processor
2 provides time slot and frame timing such that each frame comprises sixteen time slots.

1 7. (Original) The transceiving unit as recited in claim 6 wherein the sixteen time slots
2 preferably change carrier signals after two consecutive frames:

1 8. (Original) The transceiving unit as recited in claim 7 wherein unequal amounts of
2 time slots are allocated between voice and data communications.

1 9. (Original) The transceiving unit as recited in claim 7 wherein time slots 1, 2, 3 and
2 9, 10, 11 are allocated for data communications and time slots 4, 5, 6 and 12, 13, 14 are allocated
3 for voice communications.

1 10. (Original) The transceiving unit as recited in claim 9 wherein time slot 8 is allocated
2 to program the transmit carrier frequency and slot 16 is allocated to program the receive carrier
3 frequency.

1 11. (Currently amended) The transceiving unit as recited in claim 9 wherein time slots
2 1, 2, 3 and 9, 10, 11 allocate 80 bits in the a B field of each time slot to a Forward Error Correction
3 Code (FECC).

1 12. (Original) The transceiving unit as recited in claim 9 wherein time slots 4, 5, 6 and
2 12, 13, 14 allocate ~~the~~ an entire B field of each time slot to voice information.

1 13. (Currently amended) A wireless communications method over the industrial-
2 scientific-medical (ISM) spectrum comprising the steps of:

3 (a) transceiving information in a 2.4 to 2.5 GHz band; and

4 (b) adapting a DECT baseband processor to provide time slot and frame timing for step (a)
5 such that at least seventy-five ~~hopping~~ carrier frequencies between 2.4 GHz and 2.4835 GHz and a
6 minimum hop rate of 2.5 hops per second are maintained.

1 14. (Original) The method as recited in claim 13 wherein step (a) further comprises the
2 step of supporting concurrent voice and data information.

1 15. (Original) The method as recited in claim 14 wherein the voice and data information
2 are packetized into plural time slots within a time frame and share equal amounts of the time frame.

1 16. (Currently amended) The method as recited in claim 15 wherein each of the plural
2 time slots has a different one of the ~~plural frequency channels~~ at least seventy-five carrier
3 frequencies.

1 17. (Currently amended) The method as recited in claim 16 wherein each of the plural
2 time slots changes to a different one of the ~~plural frequency channels~~ at least seventy-five carrier
3 frequencies after a predetermined number of consecutive frames.

18. (Original) The method as recited in claim 16 further comprising the step of
providing time slot and frame timing such that seventy-five carrier frequencies are programmed
3 ranging between 2401.122 MHz to 2479.813 MHz and spaced 1.063 MHz apart.

1 19. (Currently amended) The method as recited in claim 18 further comprising the step
2 of providing time slot and frame timing such that each of the ~~seventy-five channels~~ carrier
3 frequencies supports a ten-millisecond frame.

1 20. (Currently amended) A system for wireless communications over the industrial-
2 scientific-medical spectrum comprising:

- 3 (a) a base station unit having a first transceiving unit;
4 (b) a cordless personal access device having a second transceiving unit; and,
5 (c) the first and second transceiving units including:
6 (i) an RF sub-module for transceiving information in a 2.4 to 2.5 GHz band; and,
7 (ii) a DECT baseband processor coupled and adapted to provide time slot and frame
8 timing to the RF sub-module such that at least seventy-five hopping carrier frequencies between 2.4
9 GHz and 2.4835 GHz and a minimum hop rate of 2.5 hops per second are maintained.
-